

## 510(k) SUMMARY

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[Submitted pursuant to 21 CFR 807.92(a). All data included in this document are accurate and complete to the best of DSC's knowledge.]

### 1. Submitter Information

**Submitter:** Direx Systems Corporation  
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Canton, MA 02021

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**Fax:** (339) 502-6018  
**Contact Person** Larisa Gershtein  
QA Manager

**Contact Person e-mail address:** lgershtein@direxusa.com

### 2. Device

**Trade/Proprietary Name:** Duet Magna  
**Common/Usual Name:** Extracorporeal Shock Wave Lithotripter (ESWL)  
**Regulation Number:** 21 CFR 876.5990  
**Regulatory Class:** Class II (special controls)  
**Product code:** 78 LNS  
**Panel:** Gastroenterology and Urology

### 3. Predicate Devices

Tripter X – 1 Compact Duet (Direx Systems Corp) ( K023535)  
Tripter X – 1 Compact Duet (Direx Systems Corp) (K041582)  
Integra (Direx Systems Corp) K053640)

### 4. Intended Use:

The DUET MAGNA is intended to fragment urinary stones in the kidney (renal pelvis and renal calyces) and upper ureter.

### 5. Description

The device is a transportable Electromagnetic Extracorporeal Shock Wave

Lithotripter incorporating a Shock Wave Generator (SWAG), a Motorized Floating Treatment Table (MFT), and a Control subsystem.

Also incorporated are interfaces for ECG synchronization, fluoroscopic imaging devices and sonographic imaging devices.

**The SWAG incorporates two stationary reflector-based electromagnetic transducers (Bottom and Top). Software control enables separate operation of the transducers in any one of three operating modes: "B" (Bottom only), "T" (Top only), "A" (B and T operate alternatively in a cyclic fashion, such that the time difference between the B and T pulses equals the time difference between the T and B pulses.**

## **6. Performance Testing**

The *DUET MAGNA* Lithotripter was tested according to the following standards:

- IEC 60601-1 (1988) +A1 (1991) +A2 (1995)
- IEC 60601-1-1 (2000)
- IEC 60601-1-2 (2001)
- IEC 60601-1-3 (1994)
- IEC 60601-2-7 (1998)
- IEC 60601-2-36 (1997)
- IEC 61846 (1998)
- IEC 60601-2-38 (1996)
- ANSI/ AAMI/ ISO 10993– 1 (1998)
- CISPR 11 (1997) + A1 (1999) class B
- IEC 60601-1-4 (2000)
- Guidance for the Content of Premarket Notifications (510(k)s) for Extracorporeal Shock Wave Lithotripters Indicated for the Fragmentation of Kidney and Ureteral Calculi; August 9, 2000

## 6. Substantial Equivalence

The intended use of **Duet Magna** is respectively similar to those of the predicate devices. The device is a modification of **Triptier Compact Duet** and is functionally similar to **Triptier Compact Duet**, except for shockwave generation that is similar to that of Integra. Furthermore, the Duet Magna has been tested and been found to conform, as do the predicate devices, to FDA recognized standards, including electrical safety testing per IEC 60601-1, EMC testing per IEC 60601-1-2, localization accuracy testing and road testing per the lithotripter special control guidance document. Based on an analysis of similarities and differences, we believe that **Duet Magna** is substantially equivalent to its predicate devices without raising new safety and/or efficacy issues.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room - WO66-G609  
Silver Spring, MD 20993-0002

Ms. Larisa Gershtein  
QA Manager  
Direx Systems Corp.  
437 Turnpike Street  
CANTON MA 02021

MAR - 1 2012

Re: K111947  
Trade/Device Name: DUET MAGNA  
Regulation Number: 21 CFR§ 876.5990  
Regulation Name: Extracorporeal shock wave Lithotripter  
Regulatory Class: II  
Product Code: LNS  
Dated: January 30, 2012  
Received: February 3, 2012

Dear Ms. Gershtein:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

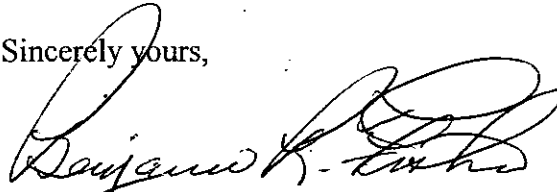
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Benjamin R. Fisher", is written over the typed name.

Benjamin R. Fisher, Ph.D.

Director

Division of Reproductive, Gastro-Renal,  
and Urological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

Section 2 Indications For Use Statement

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**Indications for Use Statement**

510(k) Number (if known): K111947

Device Name: DUET MAGNA

**Indications for Use:**

**DUET MAGNA is intended to fragment urinary stones in the kidney (renal pelvis and renal calyces) and upper ureter.**

Prescription Use - Yes  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE  
IF NEEDED)

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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

  
\_\_\_\_\_  
(Division Sign-Off)

Division of Reproductive, Gastro-Renal, and  
Urological Devices

510(k) Number

K111947